

REMARKS

This Amendment is responsive to the Office Action dated January 3, 2008. Applicant has amended claims 1-5, 7-11, 25, 26, 28 and 29. Claims 1-31 remain pending of which claims 13-24, 27 and 30 are withdrawn.

Claim Rejection Under 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claims 1-8, 10, 25, 26, 28, 29 and 31 under 35 U.S.C. 102(b) as being anticipated by Watson (5,629,780). Applicant respectfully traverses the rejection to the extent such rejection may be considered applicable to the amended claims. Watson (5,629,780) fails to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(b), and provides no teaching that would have suggested the desirability of modification to include such features.

For example, Watson fails to teach or suggest *a parameter generator to output a final set of parameters, wherein the final set of parameters is determined to result in a compressed data bit rate below a selected threshold so that a decoder will not stop during playback*, as recited by Applicant's claim 1.

In the Office Action, the Examiner characterized the quantization matrix optimizer (36) and the quantize block (38) shown in Figure 2 of Watson as allegedly teaching the "parameter generator" recited in Applicant's claim 1. Applicant has amended claim 1 to further clarify certain features of the parameter generator. In particular, Applicant has amended claim 1 to specify that the parameter generator outputs "a final set of parameters, wherein the final set of parameters is determined to result in a compressed data bit rate below a selected threshold so that a decoder will not stop during playback." Support for this amendment may be found throughout the specification including, for example, FIGS. 2, 3, and 4, and paragraphs [0006], [0029]-[0033], [0039]-[0041], [0044] and [0045].

Applicant submits that neither of the processing blocks cited by the Examiner outputs a final set of parameters having the characteristics specified in Applicant's claim 1 as amended. As shown in Figure 2 of Watson, the quantization matrix optimizer (36) creates an optimized quantization matrix for use by quantize block (38). The optimized quantization matrix, however, is not optimized to result in a compressed data bit rate below a selected threshold so that a

decoder will not stop during playback. Watson makes no mention of the generation of parameters in relation to a threshold so that a decoder will not stop during playback. Instead, the quantization matrix is optimized “for the attainment of a particular bit rate.”¹ In this regard, Watson specifically mentions that “if a bit rate results which is lower than desired, the value of the target perceptual error parameter Ψ of segment 92 is decremented.”² Hence, Watson does not contemplate generation of parameters determined to result in a compressed data bit rate below a selected threshold. Moreover, the decrementing of the parameter in Watson is “repeated until the actual bit rate is equal to the desired bit rate.”³ Only after the actual bit rate is equal to the desired bit rate does the quantization matrix optimizer (36) create an optimized quantization matrix.

Thus, in Watson, if the actual bit rate is below the desired bit rate, the quantization matrix optimizer (36) will continue to adjust the target perceptual error parameter until the actual bit rate is no longer below the desired bit rate. This is in direct contrast to the “parameter generator” recited in amended claim 1, which actually outputs a final set of parameters when the compressed data bit rate is determined to be below a selected threshold. Moreover, Watson provides no teaching that would have suggested any apparent reason to provide such a feature. Unlike the “parameter generator” recited in amended claim 1, the quantization matrix optimizer (36) in Watson does not output any parameters when the actual bit rate is below the desired bit rate, but rather internally adjusts the parameters until the actual bit rate equals the desired bit rate. Therefore, the quantization matrix optimizer (36) in Watson fails to disclose or suggest the “parameter generator” defined in Applicant’s claim 1 as amended.

The quantize block (38) relied upon by the Examiner quantizes DCT coefficients based upon an optimized quantization matrix. As already discussed above, however, the optimized quantization matrix is not optimized to result in a compressed data bit rate below a selected threshold, and particularly not a selected threshold so that a decoder will not stop during playback. Consequently, the quantized DCT coefficients generated by the quantize block (38) are also not optimized to result in a compressed data bit rate below a selected threshold. Thus,

¹ Watson, col. 10, line 67 to col. 11, line 1.

² Id. at col. 11, lines 4-6.

³ Id. at col. 11, lines 26-29.

the quantize block (38) in Watson also fails to disclose or suggest the "parameter generator" defined in Applicant's claim 1 as amended.

In summary, the cited portions of Watson fail to disclose or suggest "a parameter generator to output a final set of parameters, wherein the final set of parameters is determined to result in a compressed data bit rate below a selected threshold so that a decoder will not stop during playback," as required by amended claim 1. Moreover, because Watson fails to disclose or suggest the parameter generator defined in amended claim 1, Watson also fails to disclose or suggest "an image compressor coupled to the parameter generator, the image compressor to compress the digital image information using the final set of parameters, wherein the encoder outputs the compressed digital information," as required by amended claim 1.

Accordingly, Watson fails to disclose or suggest each and every feature of Applicant's claim 1 as amended. Independent claims 25 and 28 include limitations similar to those contained in independent claim 1. Thus, substantially the same arguments discussed above with respect to claim 1 are applicable to independent claims 25 and 28.

Moreover, Watson also fails to disclose or suggest the requirements of dependent claims 2-8, 10, 26, 29, and 31. For example, claim 10 requires that "the final set of parameters further includes Huffman code tables and the variable length coding module includes a Huffman engine to compress the quantized transform coefficients using the Huffman code tables." In support of the rejection of claim 10, the Examiner cited to col. 5, lines 25-29 of Watson, which makes a general reference to Huffman coding. Despite the reference to Huffman coding, Watson makes no mention of a final set of parameters that is determined to result in a compressed data bit rate below a selected threshold so that a decoder will not stop during playback wherein the final set of parameters includes Huffman code tables. Consequently, Watson fails to disclose or suggest the requirements of dependent claim 10.

For at least these reasons, the Examiner has failed to establish a prima facie case for anticipation of Applicant's claims 1-8, 10, 25, 26, 28, 29 and 31 under 35 U.S.C. 102(b). Withdrawal of this rejection is requested.

Claim Rejection Under 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected claim 12 under 35 U.S.C. 103(a) as being unpatentable over Watson (5,629,780). The Examiner also rejected claim 9 under 35 U.S.C. 103(a) as being unpatentable over Watson (5,629,780) as applied to claims 1 and 8 above, in view of Pian et al. (US 2002/0021754); and rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Watson (5,629,780) as applied to claims 1 and 8 above, in view of Lee et al. (US 5,576,767). Applicant respectfully traverses the rejection to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

For example, as already discussed above with respect to independent claim 1, Watson fails to disclose or suggest *a parameter generator to output a final set of parameters, wherein the final set of parameters is determined to result in a compressed data bit rate below a selected threshold so that a decoder will not stop during playback*, as recited in amended claim 1. Thus, Watson also fails to disclose or suggest the features of dependent claims 9, 11 and 12. Moreover, the other applied references, including Pian and Lee, fail to overcome the deficiencies already described above with respect to Watson. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 9, 11 and 12 under 35 U.S.C. § 103(a).

March 28, 2008

CONCLUSION

In the foregoing remarks, Applicant has focused on certain requirements of the claims for purposes of conciseness. In so doing, Applicant in no way admits or acquiesces in the propriety of the Office Action in regard to interpretation of the prior art or any of the additional limitations set forth in the various claims, including the limitations of the dependent claims.

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 17-0026. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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